

Nobility, Competence, and Disruption: Challenges to Teacher Education

By Gary D Fenstermacher

Nobility, competence and disruption—an odd union of three words. Hardly alliterative and seemingly unrelated to one another. Just how these three words might be connected, and their pertinence to teacher education, is what I propose to explore with you in the next 40 minutes.

So you know precisely where I'm headed, here's what I'm going to assert. First, competence consumes far too much of the rhetoric of education and nobility far too little. Second, even though nobility is nearly absent from the rhetoric of education, it is alive but not altogether well in American schools. Third, teacher educators exhibit a regard for both competence and nobility but their preparation programs typically stress competence and ignore nobility. Fourth, and finally, disruption in teacher education may be the best hope for the earnest and simultaneous pursuit of competence and nobility. There. That's the speech. I hope you'll stay here to see how well I do in defense of these assertions.

Many critics of schooling in America seem to believe there is only one feature of teaching that trumps all others. That feature is competence. I believe there is a second feature with similar trump value: Nobility. Sadly almost no one talks about this second feature—except teachers and teachers of teachers. When teachers and

Gary D Fenstermacher is a professor emeritus with the School of Education at the University of Michigan currently residing in Tucson, Arizona. This article is the text of his keynote address at the Spring 2015 Conference of the California Council on Teacher Education (CCTE), delivered March 19 in San Jose, California, on the occasion of CCTE's 70th anniversary. gfenster@umich.edu

teacher educators talk about nobility, they often use different words—caring, helping, empowering, doing good, making the world better. These notions are often the reason young adults become teachers. Once they become teachers, demands for competence—unaccompanied by nobility—become a reason for leaving teaching. I cannot pursue this line of argument any further without defining terms.

Competence is a term in common use in our profession. It is called upon to do a great deal of work in our field. So much so that one is reminded of Humpty Dumpty's response to Alice when she commented on his expansive use of words. "When I make a word do a lot of work like that," said Humpty Dumpty, "I always pay it extra." We educators are seriously out-of-pocket for all the work we make the word 'competence' do. In general, the word refers to the ability to do something well, to having the requisite knowledge and skill to reach a reasonable standard of excellence in one's performance. For our purposes, 'competence' refers to the practical skill of a teacher. In most instances that skill is manifest in fostering mastery of subject matter. As such, competence is situated within the domain of pedagogy, where it often connotes a proficient, perhaps even worthy performance. Defined in this way, competence is frequently accepted as the proper objective of teacher education. That is, the point of teacher education is to prepare candidates for competent performance as teachers of children and youth.

Nobility is different from competence. It is more a trait or disposition than a skill. If you were to look up the word, you would find among its several definitions the following: "having or showing qualities of high moral character, such as courage, generosity, or honor" (*American Heritage Dictionary of the English Language*, 4th edition). I'm going to expand a bit on that definition and use the word 'nobility' as shorthand for morality and courage, as well as three other traits that are related though not typically associated with the term. They are discernment, sacrifice, and passion. Were Humpty Dumpty to see what I'm doing here, he would certainly insist that I, too, pay extra. In this case, I am happy do so.

Morality, in the sense of being a moral person, refers to doing good, to doing the right thing under the circumstances. It encompasses such virtues as justice, fairness, honesty, respect, and compassion. Courage, though often included as part of morality, is here given a separate identity because it figures so prominently in teaching with moral integrity. For example, courage is often called for when a teacher must choose between the evidence of science and the biases of ideology, or take a stand for neutrality against favoritism, or when rising to the challenge of helping students who arrive at the schoolhouse door unready to learn. Discernment is the third element of nobility. It is a variant of thoughtfulness or mindfulness, and comes into play when the teacher draws distinctions and grasps nuances that play a critical role in learning. Sacrifice, the fourth element in this conception of nobility, is the willingness to relinquish a benefit for oneself in order that others may gain benefit. Sacrifice is often a powerful motivator sustaining teachers over time. Finally, the fifth element, passion—it pretty much speaks for itself. It is love for one's work, commitment to doing it well, joy when success is achieved, and perseverance when it is not.

The First Assertion

With these brief definitions in mind, let's turn to the first assertion: that competence captures far too much of the rhetoric of education and nobility far too little. I doubt you find this claim exceptional so I'll not spend much time with it. The rhetorical flourishes around the notion of competence primarily involve student achievement, wherein teachers are considered primary influences on student achievement—even primary producers of student achievement. Other features in this rhetorical constellation are standardized tests, global competitiveness, common curriculum, readiness for college or career, and accountability. Notions of equity and social justice are also often included in the discourse about teacher competence,

Nobility, on the other hand, is a word barely heard in educational policy circles or from such entities as the U.S. Department of Education, state legislatures, and, yes, even many professional education associations. One might argue that this absence is not due to having anything against nobility, but rather to the fact that nobility, particularly as I'm using it here, is such a morally loaded concept. As such, it should not be a goal of educational policy nor a formal expectation for teaching practice.

Were such an explanation offered by policy makers and educators, it would do more to show ignorance than understanding. Such a position blurs the line between religion or ideology, on the one hand, and moral qualities essential to personhood, on the other. This difference between ideology and morality has been explored in scores of philosophical works, so allow me to develop it by cutting right to the classroom context. Consider how challenging classroom teaching would be if teachers did not invoke such moral traits as kindness, fairness, honesty, and respect, or tried to manage a classroom without turn-taking, sharing, and other forms of reciprocity among persons.

In a three-year study Richardson and I did on how teachers foster or inhibit the moral development of their students, we found that many teachers do not see themselves as engaged in moral education even though they daily remind their students to be honest, to avoid cheating, to take turns, to help other students, to show respect, and to value work done well. When these features of their practice are pointed out to them, many of the teachers in our study were—at first—surprised to find themselves engaged in moral education. I recall one of the teachers saying, "I had no idea how much of my Catholic upbringing has become so much a part of the way I teach."

Spending any time at all in classrooms with an eye open to its moral features deals a great blow to those who would argue that nobility is absent from educational discourse because of its inherently moral properties. Put this realization together with the fact that virtually every philosopher of education from Aristotle to Dewey would not even consider defining the word 'education' absent what I am here calling nobility and you are left to wonder why its features are among the unmentionables of contemporary schooling.

The Second Assertion

This insight leads us to the second assertion that even though nobility is nearly

absent from the rhetoric of education, it is alive but not altogether well in American schools. I've already mentioned how nobility is alive in the classroom, but only hinted at its state of wellness. It is to this state of wellness that I want to turn. In saying nobility is not well, I mean that its manifestations in practice are frequently naïve or addressed by morphing into just another school subject, as when it becomes a curriculum for character education or civic education.

To say that the moral aspects of teaching are naïve is to say that they are employed with too little understanding of what one is doing. I've already spoken of the teachers in our study who responded with surprise (and in many cases, delight) on learning to recognize the moral dimensions of their practice. Although many of the teachers had what might be considered a subliminal or preconscious sense of how their work called for morality, courage, discernment, and sacrifice, they had not given these features much consideration as key elements of their pedagogy. I suppose that, given the absence of nobility in educational discourse, it should not surprise us that the moral dimensions of teaching are only vaguely understood and little attended to. Yet it also gives cause to wonder whether the teachers of these teachers might also be naïve about nobility. Before moving on to explore that possibility, consider another reason why nobility is not well in American classrooms.

Character education has so many variations that Humpty Dumpty would go broke paying for the extra work. It has been used to refer to moral education, civic education, life skills development, anti-bullying, and even religious education. I treat these programs with some skepticism because they too easily become a substitute for nobility as an essential feature of pedagogy. That is, the ideals and values featured in these programs become something teachers talk about to students rather than incorporate as part of their practice and their expectations for their students' conduct. As an example, consider the difference between the teacher who shows courage and calls for courage on the part of his students, and the teacher who engages his students in the study of courage. While there is certainly value in the study of courage, as it appears in biography, novels, or character education materials, it is an activity quite different from acting courageously and encouraging others to act courageously. This difference between having the idea of courage and possessing courage as a trait of one's behavior has been made many times by ethicists.

I wonder if you might be asking yourself at this moment why I'm going on so much about courage, given that it does not seem to be all that critical to the educative endeavor. I believe it has a central place in education, but we miss that place because the word is so often associated with how we respond to personal threat and danger. In contrast, when a teacher asks a student to try a new learning task or grapple with an unfamiliar problem, that teacher is asking the student to be courageous. By understanding that courage is in play when the teacher asks for new or unfamiliar engagement, the teacher responds differently to the student than is the case when the request to engage rests solely on authority. When a teacher addresses a student's fear for algebra, public speaking, or solo performance with the understanding that a call for courage has been made, it leads not only to a different pedagogical response but also to moral enhancement for the student,

Character as a subject of study can support the teacher in this endeavor, but it is not a substitute for the teacher's own attention to and encouragement of traits of

character. Character education programs—the good ones—can serve as a means for giving permission to teachers to address matters of nobility, and they can alert students to the place that nobility has in the life of the school, but character education programs are not a substitute for a teacher's nourishing the development of character in the course of normal, everyday instruction.

In exploring the second assertion, that nobility is alive but unwell in the classroom, I've argued that acts of nobility occur all the time in classrooms—indeed it is difficult to imagine teaching taking place without elements of nobility—but that these acts are poorly understood and inadequately pursued by teachers. It leaves one wondering if the teachers of these teachers understand the place of nobility in the pedagogical development of their students. That query is the segue to the third assertion, that teacher educators, in general, exhibit a regard for nobility but their preparation programs typically aim for competence and ignore nobility.

The Third Assertion

I would like to approach this claim obliquely, with a bit of autobiography. In the early 1960s, several professors in the School of Education at Cornell University sought funding from the federal government under legislation known as the National Defense Education Act. The presumptive purpose of that Act was to increase the technological sophistication and power of the United States. One section of the Act included generous fellowships for doctoral study. To compete for this fellowship support, these Cornell faculty members submitted a proposal that was heavily biased toward study of the liberal arts, with limited consideration for education courses. Their proposal for advanced study in the history and philosophy of education was funded, and I was among the fortunate recipients of that fellowship.

The adviser assigned to me on entering the program was a philosopher of education who was devoted to the work of John Dewey. He told me it was important for me to be qualified in the discipline of philosophy and that I should enroll in graduate courses in that department and return to the school of education after completing at least a year and a half of study there. Obedient novitiate that I was, I followed his instructions. I'm afraid I went overboard. When I sat for my doctoral examinations, I had completed just two courses and two seminars in Education; all the rest was in philosophy, with a few in psychology. My adviser seemed delighted with my studies, but I would soon learn that employers had a different perspective.

Upon accepting my first faculty position at the University of California, Los Amgeles, it did not take long to discover that I was well-prepared in a discipline of little interest to most of my colleagues and ill-prepared in the field that was providing my paycheck. I floundered for two years and finally mustered the courage to see the dean to confess that I was a disaster at what I had been hired to do. He listened to my lamentation, asked a few questions, then offered the following comment:

I don't see a great problem here, Gary. After all John Dewey was trained in philosophy. Perhaps you might turn out to be the next Dewey. If that's going to happen you need to know what teaching and schooling are all about, and you need to have a deeper understanding of teacher education. To take care of the first, I can arrange for you to join a teaching team at the University Elementary

School. But if I do that, you must agree to stick with the work for at least a year. To handle the second, gaining an understanding of teacher education, I'll appoint you as assistant to the director for the Laboratory in Teacher Education, but not until you've finished at least a full year at the elementary school. The other thing I'll do, starting right now, is appoint you as one of our representatives to CCET [California Council for the Education of Teachers, the predecessor to CCTE].

The dean was John Goodlad. I'm paraphrasing his words because I was too stunned at the time to recall them with any precision. Me, the next John Dewey? Nice try; I hardly knew who John Dewey was, as the name and the work were entirely ignored in Cornell's department of philosophy. Me, a teacher in an elementary school classroom? Ha! What an embarrassment it would be, to be a professor of education showing up in an elementary school unable to differentiate wait time from seat time, or phonics from whole language. And what the hell was CCET? I was but five months away from finding out, when I arrived at the Miramar in Santa Barbara for the 1971 spring conference.

I left that meeting with three impressions—all easy to recall because that meeting was a turning point in my career. The first is that these people are about the most gracious, most considerate professionals I had ever encountered, as a client or a colleague. So very different from the impersonal, Vulcan mind-meld colleagues I encountered at meetings of the American Philosophical Association or the Philosophy of Education Society. CCET members clearly cared, not simply about the topics under discussion but about including me in them. My second impression is that these people had fun; they laughed a lot and took pleasure in one another's company. This impression of teacher educators was later validated at Virginia Tech, the University of Arizona, the University of Michigan, and scores of other teacher education programs I visited as part of research projects or as a member of accreditation teams. I admit, though, that my warmest memories of professionals good and true, as well as the most fun I've ever had in any professional association, was with CCET.

So, warmth, graciousness, laughter, and commitment were part of the first two impressions. The third impression was that the discourse did not push very far into the theory or research in teacher education. Much of it appeared focused on state regulations, accreditation, and what was happening at other teacher preparation programs. In subsequent years, after I became more conversant with the field, I would find this discourse valuable. But neither then nor now is it a discourse that interrogates dominant paradigms, pushes at the epistemic and moral foundations of teacher education, or reframes notions of pedagogy and its articulations in American schooling. I know that such explorations are a lot to ask of any association or conference, but these are the explorations that should be logically prior to such topics as regulation, accreditation, and program development.

Wait! That's way too glib. Of course deep and critical inquiry should be logically prior to the institutional and administrative features of what we do. Everybody knows that. But our capacity to do it is limited by the fact that we are, to use the much-worn airplane analogy, always in flight, and almost never parked at the hanger where major overhaul occurs. That makes it very difficult for us to perform as pilots, aerodynamic engineers, and theoretical physicists at the same time. I'm

sympathetic to this predicament, but there is a steep price to be paid for this deflection of fundamental questions. Consider the rather bold claim Lee Shulman made several years ago in a brief essay entitled "Teacher Education Does Not Exist." Because Shulman is always worthy of quoting at some length, I'm going to do just that. He states:

We must rapidly converge on a small set of "signature pedagogies" that characterize all teacher education. These approaches must combine very deep preparation in the content areas teachers are responsible to teach (and tough assessments to ensure that deep knowledge of content has been achieved), systematic preparation in the practice of teaching using powerful technological tools and a growing body of multimedia cases of teaching and learning, seriously supervised clinical practice that does not depend on the vagaries of student teaching assignments, and far more emphasis on rigorous assessments of teaching that will lead to almost universal attainment of board certification by career teachers. The teacher education profession must come to this consensus; only then can accreditation enforce it. Commitment to social justice is insufficient; love is not enough. If we do not converge on a common approach to educating teachers, the professional preparation of teachers will soon become like the professional education of actors. There are superb MFA programs in universities, but few believe they are necessary for a successful acting career.

What I understand Shulman to be asserting here is that if teacher educators do not coalesce around a small set of signature pedagogies, their programs will be thoroughly marginalized. His reference to signature pedagogies derives, I believe, from preparation programs for lawyers, physicians, and the clergy, where there is a good deal more agreement on the necessary procedures, experiences, materials and assessments for effective preparation. Moreover, it is clear, given the title Shulman gave to his commentary ("teacher education does not exist") that he believes there are currently no signature pedagogies in teacher education.

Though Shulman often razzes me that I've gained far too much success from critiquing his work, this is an occasion to praise his advocacy for signature pedagogies. The formulation of such pedagogies is critically important work for teacher education. I do want to add, however, that what makes a pedagogy "signature" is more than its being adopted as a much-used and honored means of preparing professionals. It is also the aims of that pedagogy and the ideals that undergird it. A pedagogy for the preparation of lawyers that failed to achieve justice and fairness would not be a candidate for signature status. A pedagogy for the preparation of physicians that failed to address standards of care and well-being would not be a candidate for signature status. A pedagogy for the preparation of teachers that fails to address and sustain nobility has no claim to signature status.

In search of a signature pedagogy for teacher education, consider what the simultaneous pursuit of competence and nobility might look like. In the course of the work Richardson and I did on the moral aspects of teachers' work, we drew a distinction between the methods teachers used to convey subject matter and the manner they expressed as they went about this work. For example, instructional activities like explaining, describing, appraising, assigning, and grouping can be undertaken with kindness, fairness, and integrity—or, in contrast, with meanness,

authoritarianism, or unfair advantage for a subset of students. In actual practice, method and manner are interconnected and seamless. Richardson and I separated one from the other as an analytical device, as a way, if you will, to gain access to the moral aspects of teaching. It also permitted us to better understand how competence, in this case in the form of methods, and nobility, in the form of manner, can be complementary to one another and simultaneously pursued.

The teachers we studied were typically unaware of the moral dimensions of their practice and hence unable to reflect on and perfect these aspects of their practice. Our separation of manner from method gave the teachers a way to see and ponder the moral dimensions of their work. Unaware of these dimensions, they cannot reflect on the integration of method and manner and how that integration might enhance their effectiveness and their satisfaction with their work. Yet another cost of blindness to the moral work of teaching is the loss of opportunities for a teacher to explore his or her own moral conduct—both in the persona of teacher and as a member of the human community.

Our research is but one approach teacher educators might employ to engender nobility along with competence. There are quite a number of other approaches, to be found, for example, in the work of Elizabeth Campbell, William Damon, David Hansen, Nel Noddings, Hugh Sockett, and the volume edited by John Goodlad, Roger Soder, and Ken Sirotnik (*The Moral Dimensions of Teaching*). A recent work by Matthew Sanger and Richard Osguthorpe, entitled *The Moral Work of Teaching and Teacher Education*, does a splendid job of pointing teacher educators to the construction of pedagogies that integrate competence and nobility.

We have reached the point of being able to raise the question that takes us to the fourth and final portion of this address: How might teacher educators coalesce around a limited number of signature pedagogies whose aim is competence and nobility?

The Fourth Assertion

There are three key words in the title of this address: Nobility, competence, and disruption. So far we have dealt with just the first two. It's time to consider disruption. The meaning most often associated with this term is "to throw into confusion or disorder" (*The American Heritage Dictionary*, fourth edition). This is certainly the sense of disruption in use when describing the impact of the Internet on brick-and-mortar retail business. It is what Amazon did to Barnes and Noble, Borders, and Circuit City; what the iPod and MP3 players did to record and CD stores; what Internet streaming is doing to broadcast and cable television. Disruption of this kind was, at first, seen as destructive and hurtful. Today it is among the desiderata of American business, something that professors of business praise and corporate CEOs chase.

Teacher education, as practiced in institutions of higher education, has experienced a modest degree of disruption from the likes of alternative certification, Teach For America, Internet course providers, and occasional efforts at fundamental reform, such as the Holmes Group. The response to these modest disruptions, as I see it, has been to go on the defense, often redoubling our efforts to do better what

we've been doing all along. You will not be surprised to learn that this course did not work for Borders or CD stores.

Teacher education is not entirely blameworthy for its response to disruption. The colleges and universities where so many teacher prep programs are situated share a significant portion of responsibility. Too often teacher education is an incidental feature of their mission and they do little to close the gap between academic research and professional practice. The K-12 system also shares a measure of blame for its relative lack of consideration for initial and continuing teacher education and its frequent unwillingness to allocate resources to collaboration with higher education. The educational policy environment is blameworthy, too, as has become so concentrated at state and federal levels where the abiding interest is in outcomes more grossly economic than grandly educative.

This is not an easy arena for teacher education. Caught between the competing demands of higher and K-12 education, situated in a policy environment that runs counter to many of the core values of educators, while bereft of signature pedagogies that validate the field, significant disruption to teacher preparation as we know it is not a matter of if, but when. The question, as always, is whether we are the disrupters or the disrupted. The historical record indicates that the disrupted are highly unlikely to be the disrupters. But history is yesterday and possibility is tomorrow. Consider how we might embrace the possibilities.

One way already well known to you is the now quite large body of research on effective teaching. This research needs to be translated for practice, as William James pointed out so powerfully in his Talks to Teachers. This translation is a key task for the construction and adoption of signature pedagogies that foster competence. Another resource is the previously mentioned studies of the moral work of teaching, which provide much of the groundwork for fostering nobility. This commitment to nobility is further enhanced with the work on democracy and education, as developed by John Dewey and such contemporary scholars as Amy Gutmann, Diane Ravitch, Eamonn Callan, Benjamin Barber, and John Goodlad and his colleagues at the Institute for Educational Inquiry. A third line of development is the work by philosophers and educational theorists on the practical—on how the pursuit of the practical, properly conceived, is as intellectually demanding and enriching of life as the pursuit of the theoretical. Thanks to the work of the Carnegie Foundation for the Advancement of Teaching—where Ernest Boyer and Lee Shulman and his colleagues have done so much to advance the scholarship of teaching and learning—teacher educators have a trove of resources for building signature pedagogies. Finally, there is an extensive body of work on the formation of networks and partnerships to encourage renewal of both teacher education programs and school-university relationships.

In short there is a large and powerful body of knowledge and understanding with which to design and adopt a limited number of signature pedagogies, and with these pedagogies, to lay claim to a different, richer, far more robust concept of best practice than the one in common use today.

Even with these signature pedagogies in hand, teacher educators may not be able to control the disruptive forces that surround their work. For, in addition to how we do teacher education, there are matters of where and when it is done. In the

case of where, the geography of teacher education may act as a limit on forming and deploying signature pedagogies. That is, where teacher education occurs—in universities, in teachers colleges, in school districts, in the spaces between—interacts powerfully with how it occurs.

The question of when initial teacher preparation should occur opens a reconsideration of how internships, observations, course work and student teaching are sequenced across the program. Most of us are accustomed to thinking of teacher education occurring before a teacher teaches. What might happen if that sequence is turned on its head, where teacher education occurred after the candidate has taught? It sounds counter-intuitive at first, yet consider the higher levels of satisfaction reported by many teacher educators when their students have had experience as teachers. Perhaps a well-mentored student teaching course should precede rather than follow other coursework in teacher education?

The development and successful implementation of signature pedagogies depends not only on our answers to how, but also to our decisions about when and where. Indeed, if teacher educators are to be disrupters rather than the disrupted, they must articulate and advocate for all three. Whatever the shape and substance of this articulation, it will be incomplete if it lacks nobility. Without nobility, teacher education is far less a calling and far more a chore. Without nobility, teacher education may serve competence but it does not serve what Aristotle called the greatest good, *eudaimonia*—often translated as happiness but far better translated as human flourishing.

Conclusion

Nobility, competence and disruption—an odd union of three words. Hardly alliterative and seemingly unrelated to one another. Just how these three words might be connected is what I hope I have succeeded in showing. I confess to a bit of sleight of hand here, as I could have said that true competence includes morality, courage, discernment, sacrifice, and passion. But separating nobility from competence, like the separation of manner from method, is a way of insisting that we do not lose sight of nobility while engaged in the pursuit of competence. With such a rich distinction in hand, Humpty-Dumpty would not need to pay anything extra. Indeed, I believe it would result in a tidy credit to his account.

Enough. It is time to close. Before I do so, I want to wish a heartfelt happy 70th anniversary to CCTE. It is an organization that has meant much to me over the years and brought so many good things to my career as an academic and teacher educator. So, allow me to end with this wish for you: May you experience the delight and the privilege of being asked to address this remarkable group some ten years after your retirement. It is a high honor for me—an honor clearly made possible by your graciousness, your passion, and your courage ... in short, your nobility.

Thank you.

References

Alexander, R. (2000). Culture and pedagogy. Oxford, UK: Blackwell.

- Barber, B. R. (1992). An aristocracy of everyone. New York: Ballantine Books.
- Callan, E. (1997). Creating citizens. Oxford, UK: Clarendon Press.
- Comte-Sponville, A. (1996). A small treatise on the great virtues. New York: Metropolitan Books.
- Fallona, C., & Richardson, V. (2006). Classroom management as a moral activity. In C. M. Evertson & C. S. Weinstein (eds.), *Handbook of classroom management* (pp. 1041-1062). Mahwah, NJ: Lawrence Erlbaum Associates.,
- Goodlad, J. I, Soder, R., & Sirotnik, K. A. (1990). *The moral dimensions of teaching*. San Francisco: Jossey-Bass.
- Lampert, M. (2001). *Teaching problems and the problems of teaching*. New Haven, CT: Yale University Press.
- Noddings, N. (2013). *Education and democracy in the 21st century*. New York: Teachers College Press.
- Richardson, V., & Fenstermacher, G. D. (2001). *Journal of Curriculum Studies*, 13(6), November-December (entire issue devoted to the Manner in Teaching Project).
- Salvatori, M. R. (1996). *Pedagogy: Disturbing history: 1819-1929*. Pittsburgh, PA: University of Pittsburgh Press.
- Sanger, M. N., & Osguthorpe, R. D. (2013). *The moral work of teaching and teacher education*. New York: Teachers College Press.
- Shulman, L. (2005). Teacher education does not exist. *Stanford Educator*, Fall. Web access at: file://localhost/(https/::ed.stanford.edu:sites:default:files:suse-educator-fall05.pdf)
- Shulman, L. (2005). Signature pedagogies in the professions. *Daedalus*, Summer, 52-59. Web access at: http://diyhpl.us/~bryan/papers2/paperbot/5e74b13008997b5a78da2ad 81fd07317.pdf
- Shulman, L. (2005). The signature pedagogies of the professions of law, medicine, engineering, and the clergy: Potential Lessons for the Education of Teachers (address to the Math Science Partnerships (MSP) Workshop: Teacher Education for Effective Teaching and Learning), National Research Council's Center for Education February 6-8, 2005, Irvine, California). Web access at: http://www.taylorprograms.com/images/Shulman_Signature_Pedagogies.pdf
- Sockett, H. (1993). The moral base for teacher professionalism. New York: Teachers College Press.